

**MEMORANDUM TO THE
HOSPITALS ADVISORY COMMITTEE
13 JUNE 2018**

AGENDA ITEM 5.3

**IMPROVING THE LIVES OF OLDER PEOPLE IN THEIR LAST 1000
DAYS**

Purpose

1) To provide information to the Committee Members

Attached is a report on the “Improving the lives of older people in their last 1000 days”. On the day of the Committee Meeting a presentation will be provided to the Committee to provide further information on the project.

Recommendation

THAT

The report and presentation be received.

BARBARA GARBUTT

DIRECTOR OLDER PERSONS REHABILITATION AND ALLIED HEALTH

Optimising pathways for frail older people

Document brief outlining an approach to improve the quality of life for frail older people by increasing their days in their own home in their last year of life. The approach will reduce:

- ED attendances;
- Admissions to hospital; and
- Complex medical and surgical interventions.

The document is intended to gauge interest only and will require a full business case should the need arise. The intervention aims to integrate Advance Care Planning (ACP) into primary care alongside implementation of an ED administered last year of life prediction tool. The tool aims to support ED clinicians in their difficult conversations with frail older people in relation to their treatment options. The tool should be seen as part of a system wide approach to improve the lives of older people in their last 1000 days of life.

1 Predicting the last 1000 days of life

Key points

- There are 9000 older people in the Waikato region who have had an interRAI assessment undertaken on them
- The assessments were matched with mortality data
- 50% of older people with **non-complex** needs who have a long-term disability requiring help with housework or showering are **dead** within **18 months** of the assessment and 75% are dead within 1000 days
- 50% of older people with complex needs who have a long-term disability are **dead** within **10 months** of the assessment and 91% are dead within 1000 days
- 50% of older people in Aged Residential Care are dead within 8 months of the assessment and 99.9% are dead within 1000 days
- The interRAI assessment by DSL is the best predictor of last 1000 days

Disability Support Link (DSL) manage all assessments for older people (65+)¹. People with non-complex needs living at home undergo a brief assessment (Contact Assessment), those with complex needs living at home undergo a comprehensive geriatric assessment (Home Care assessment) and those living in Aged Residential Care undergo a modified comprehensive geriatric assessment (Long-Term Care assessment). Figure 1 highlights the relationship.

¹ or Māori/Pacific (55+) or people (55+) with a condition that is determined to be an age-related condition (Like Age and Interest).

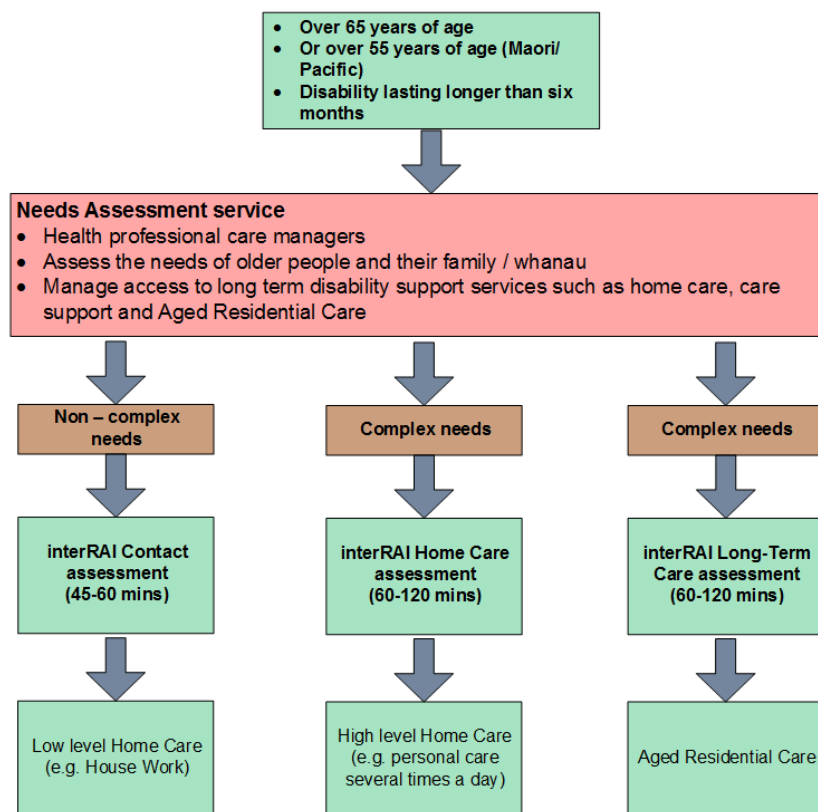


Figure 1: Assessments of older people in Waikato DHB

Assessments and mortality were matched over a five-year period and the results are shown in Table 1.

Table 1: Mortality and assessments in Waikato

Assessment	Percentage mortality at 1000 days	Median survival
interRAI CA	75.0%	566 days 50% dead, 18 months after 1 st assessment
interRAI HC	91.0%	300 days 50% dead, 10 months after 1 st assessment
interRAI LTC	99.9%	240 days 50% dead, 8 months after 1 st assessment

2 Advance Care Planning to minimise ED presentation and hospital admission

Key points

- Advance Care Planning (ACP) is an international approach to give patients a voice around how they want to be treated in their last period of life
- GPs are ideally located to deliver ACP and upload the plan to a clinical work-station viewed by ED
- The DSL assessment provides a systematic way of identifying older people who may benefit from an ACP
- DSL can initiate a conversation with the older person and refer to their GP
- GP ACP visits can be funded at a cost of around \$150,000 per annum and within two years all older people known to DSL will have an ACP.
- The process can reduce ED attendances and hospital admissions.

Advance Care Planning (ACP) is an international movement, primarily directed at older people towards the end of their lives. There is a standardised training programme, currently being delivered to GPs across the Midlands region. GPs are in an ideal position to develop an ACP for older people as they are invariably the most well acquainted with the older person and their family/whānau. ACP can identify a general direction of response according to illnesses or injuries that the older person may experience. ACP can be uploaded to the clinical work station and viewed by ED. However more importantly, it may prevent ED attendances entirely and the patient may opt to be treated by their GP. Only 4 percent of clients with an interRAI assessment have an ACP recorded.

Given that we now know that the majority of older people following their first assessment with DSL have 1000 days or less to live, the first assessment is the obvious point at which to initiate ACP with the GP. To maximise uptake, visits could be funded (@\$100.00 for 30 minutes) and the referral made following the DSL assessment. Initial conversations around the process can take place at the assessment.

There are 200 new assessments per month by DSL (around 130 living at home) and 9000 clients in total. Of these, 3000 live in Aged Residential Care, and the facility is already contracted to develop Advanced Directives for all clients. With this in mind and considering the mortality rates within this group, if the approach is implemented, within two years all older people would have an active ACP, at the cost of around \$150,000 per annum (for 30-minute consultation @ \$100.00). Analysis of the data reveals that in the last 250 days of life older people on average make over 3 separate visits to ED and spend almost 4 days in hospital.

3 Supporting difficult conversations in ED

Key points

- Despite a successful implementation of ACP, older people in their last year of life will inevitably attend ED and their risk of admission is high
- Difficult and complex decisions are made daily around how to treat older people in those few days within the stressful and acute ED environment.
- ED have been requesting a Frailty index to support decision making. The best tools available are the Frailty Index with predictive qualities of 0.77 and Edmonton Frail Index of 0.76
- The Frailty Index has between 50 and 70 items to be tested and the Edmonton 17 items. Although both have fair predictive qualities, they would be difficult to implement within an ED environment
- Using the same dataset to inform the last 1000 days analysis, we have identified a new approach, whereby age filters the response and two questions have a 0.8 predictive quality at 1 year, a more useful time-period than the 2 years currently being assessed with the Edmonton and Frailty Index.
- The tool should be used to guide conversation rather than direct interventions
- ED and acute care geriatricians can support decision making in these instances and direct care accordingly
- An immediate community care response will be required to redirect older people and START with appropriate Home Care can provide appropriate support.

The Last 1000 days dataset was analysed in several ways to identify the best method of predicting mortality. The most recent interRAI assessment was used and mortality was analysed at 6 months, 12 months and 24 months. Table 2 presents the overview.

Table 2: Descriptive mortality data (n=15,946)

Days from most recent interRAI assessment to death	Days
6 months	5,924 (37% dead)
12 months	9,381 (59% dead)
24 months	12,220 (77% dead)

The need to ensure that any tool can be readily and easily applied within an acute ED environment was paramount and therefore two major factors strongly influenced the design of the tool: Ease and speed of completeness by ED staff and type of information required from the older person and/or their family member. Several steps were applied:

1. Identification of variables that were both statistically correlated with mortality AND had the highest relationship with mortality as tested with the Cox's Proportional hazard risk
2. Series of regressions and multiple discriminatory analysis to identify the variables with the best predictor of mortality. Three were selected as the best fit both statistically and clinically:
 - a. Does the patient require Supervision or any physical assistance with **personal hygiene**?
 - b. Supervision or any physical assistance with **locomotion** (walking)?
 - c. Supervision or any physical assistance with **dressing their lower body**?
3. Analysis is ongoing and a more accurate predictor using appropriate algorithms will be ready shortly, but in the meantime, the diagram over-page illustrates the tool that can be implemented within ED.

The tool requires further validation but has been included here to allow discussion around how such an approach can aid difficult decisions within ED. There is an international trend to base Acute Care Geriatricians in ED to support such decision making and optimise the most appropriate journey for older people

A transition in the way in which acute community services are currently configured is required, particularly in how START can activate from ED and the provision of Home Care services.

